

0CLC 9714883 ✓

Number 27

Price, 25 cents

**REPRINT AND CIRCULAR SERIES**  
OF THE  
**NATIONAL RESEARCH  
COUNCIL**

**LIST OF MANUSCRIPT BIBLIOGRAPHIES IN  
GEOLOGY AND GEOGRAPHY**

**COMPILED BY HOMER P. LITTLE**

**Executive Secretary, Division of Geology and Geography,  
National Research Council**

UNIVERSITY OF CALIFORNIA  
AT LOS ANGELES

NOV 27 1922

LIBRARY

California  
Regional  
Facility

Washington, D. C., February, 1922

# **Announcement Concerning Publications of the National Research Council**

---

**The Proceedings of the National Academy of Sciences** has been designated as the official organ of the National Research Council for the publication of accounts of research, committee and other reports, and minutes.

Subscription rate for the "Proceedings" is \$5 per year. Business address: Home Secretary, National Academy of Sciences, Smithsonian Institution, Washington, D. C.

**The Bulletin of the National Research Council** presents contributions from the National Research Council, other than proceedings, for which hitherto no appropriate agencies of publication have existed.

The "Bulletin" is published at irregular intervals. The subscription price, postpaid, is \$5 per volume of approximately 500 pages. Numbers of the "Bulletin" are sold separately at prices based upon the cost of manufacture (for list of bulletins see third cover page).

## **The Reprint and Circular Series of the National Research Council**

renders available for purchase, at prices dependent upon the cost of manufacture, papers published or printed by or for the National Research Council (for list of reprints and circulars see fourth cover page).

Orders for the "Bulletin" or the "Reprints and Circulars" of the National Research Council, accompanied by remittance, should be addressed: Publication Office, National Research Council, 1701 Massachusetts Avenue, Washington, D. C.

REPRINT AND CIRCULAR SERIES  
OF THE  
NATIONAL RESEARCH COUNCIL

NUMBER 27

---

LIST OF MANUSCRIPT BIBLIOGRAPHIES IN GEOLOGY AND  
GEOGRAPHY

COMPILED BY HOMER P. LITTLE

---

At the annual meeting of the Division of Geology and Geography of the National Research Council on April 28, 1921, the following motion was passed:

*Moved:* That the Chairman of the Division consult with the Secretary of the Geological Society of America to consider the following plan, namely, to ask its members to report to the Secretary of the Society, or any other designated person, in form for publication in the Bulletin of the Geological Society of America, the subjects on which they have special bibliographies or card indices, the character of the bibliography and the conditions under which such bibliographies may be used by correspondence or visit.

*Adopted.*

In pursuance of this motion, and after consultation with the Secretary of the Geological Society of America, a circular letter was sent to the members of that Society asking them to cooperate in providing such a list of unpublished bibliographies by reporting those manuscripts which they themselves possessed or of which they might have knowledge. The original plan was enlarged to include many geologists outside of the Society and those geographers whose names were available from the membership lists of their Societies.

The results are compiled in the list which follows.

In order to make this of practical value it has been necessary to indicate something of the completeness of each bibliography. Special attention, however, is called to the fact that this is in all cases the author's own valuation. Where the incompleteness is considerable, the bibliography has been omitted from this list though carefully filed for reference.

Where a reference for consultation is given, the author has expressed a willingness to place his information at the service of all interested in the same or related subjects; the few exceptions to this are where the author has very evidently neglected to state his attitude toward being consulted because of his expressed feeling of the inadequacy of his bibliography. In all cases where, for various reasons, consultation is definitely undesired, note has been made of this fact.

It is hoped that the geologists of the country will show their approval of this work by reporting to the Division new manuscript bibliographies as prepared. The Division is now actively at work, with the assistance of the Research Information Service, compiling an international bibliography of bibliographies. This will bring the publication of de Margerie, which appeared about twenty-five years ago, to date. The completion of this task, together with the coöperation of the geologists of the country in keeping the manuscript list which follows up to date, will, it is believed, be of much assistance to all whether their primary interests be economic, teaching, or research. Inquiries will always be welcome and all aid possible will be promptly given from the office of the Division, 1701 Massachusetts Avenue, N. W., Washington, D. C.

#### **Agricultural Geography**

1. **Agricultural Meteorology** (Relation of Meteorological Elements to Agriculture)—Division of Agricultural Meteorology, U. S. Weather Bureau, Washington, D. C.  
About 2300 entries, by subject and author. Increased approximately 2000 cards a year.  
For consultation address U. S. Weather Bureau, Washington, D. C.
- 1a. **Land Utilization (Potential Arable Land)**—Land Utilization Committee, U. S. Department of Agriculture, L. C. Grey, Chairman.  
About 1000 cards, in process of rapid extension.

#### **Alabama**

- 1b. **Bibliography of the Geology of Alabama**—Udden, Jon A.  
Fairly complete to 1917. For the most part systematically arranged from the U. S. Geological Survey bibliographies.  
For consultation, address J. A. Udden, Sinclair Building, Tulsa, Oklahoma.

**Areal Geology.** See No. 58 and specific regions.

#### **Arkansas**

- 1c. **Geology, Mineralogy, and Paleontology of Arkansas**—Branner, J. C.  
Kept up to date since its publication in 1909.

**Bad Lands.** See No. 88.

#### **Barbados**

- 1d. **Geography of Barbados**—Foster, Alice.  
21 entries, incomplete. A copy is on file with the Division of Geology and Geography.

**Barite**

2. Barite—Tarr, W. A.  
200 entries, 95% complete. Mostly abstracted.  
For consultation, address W. A. Tarr, 1316 Ross Street, Columbia, Missouri.

**Bauxite**

3. Geology of Bauxite Deposits in the World—Hill, J. M., *et al.*  
About 300 entries, abstracted in part. Not yet complete or in shape for consultation.

**Brachiopods**

4. Brachiopods—Twenhofel, W. H.  
Fairly complete from Schuchert's Bulletin to 1912.  
For consultation, apply to W. H. Twenhofel, University of Wisconsin, Madison, Wisconsin.
5. Genotypes of Brachiopods—Greger, D. K.  
Kept up to date for British and American genera. Quite complete up to 1918 for other countries.

**Brazil**

6. Geology, Mineralogy, and Paleontology of Brazil—Branner, J. C.  
2000 titles, continues to date bibliography published by the Geological Society of America, Volume 20, pages 1-132, 1909.  
See also Nos. 56 and 119.

**Building Stones**

7. Bibliography of Building Stones—Merrill, George P.  
In form of card index making no pretense of completeness.  
For consultation address, G. P. Merrill, U. S. National Museum, Washington, D. C.
8. Foreign Building and Ornamental Stones—or—Stone Industry in France, Italy, British Isles and Belgium—Hopkins, T. C.  
90% complete.  
For consultation, address B. L. Johnson, Bureau of Foreign Mineral Reserves, U. S. Geological Survey, Washington, D. C.  
See also No. 57.

**California**

9. California—Woodford, A. O.  
About 1800 entries. A cumulative index from Geological Survey bibliographies with a few additional entries.  
For consultation, address A. O. Woodford, Claremont, California.

**Cambrian**

10. Geology and Paleontology of the Cambrian—Howell, B. F.  
About 1000 entries. Complete only for Newfoundland.  
For consultation, address B. F. Howell, Princeton University, Princeton, N. J.
11. Geology and Paleontology of the Cambrian of the World—Resser, C. E.  
Three-fourths to four-fifths complete.  
For consultation, address C. E. Resser, U. S. National Museum, Washington, D. C.

**Canada**

12. Anticosti Island—Twenhofel, W. H.

Probably complete. Small except for faunas.

For consultation, address W. H. Twenhofel, University of Wisconsin, Madison, Wisconsin.

See also No. 10.

**Carboniferous**

13. Bibliographical Index of North American Carboniferous Invertebrates—Weller, S.

Many thousands of entries, nearly 100% complete. Brings to date the list published in Bulletin 153, U. S. Geological Survey, 1898.

See also Nos. 87, 91, 93 and 94.

- 13a. Paleontology, Carboniferous and Permian—Beede, J. W.

Three-fourths complete. By author, title and species.

For consultation write or visit J. W. Beede, 412 W. 17th Street, Austin, Texas.

**Ceramics.** See No. 15.**Chert**

14. Chert—Tarr, W. A.

200 entries, 90% complete, mostly abstracted.

For consultation, address W. A. Tarr, 1316 Ross Street, Columbia, Missouri.

**Clay**

15. Clays and Ceramic Arts—Branner, J. C.

600 entries. Brings to date the bibliography published by the Ceramic Society in 1906.

**Climatology**

- 15a. Climatology and Climatography.

The Library of the U. S. Weather Bureau, Washington, D. C., maintains a running bibliography on these topics, in conjunction with other branches of meteorology (also seismology), in the shape of two catalogues; one of books and other separate publications, the other of contents of scientific journals. The additions to both are published monthly in *Monthly Weather Review*. The total number of titles added to the catalogues annually is estimated at 2,000, of which upwards of one-third relate to climatography and climatology.

For consultation address Chief, U. S. Weather Bureau, or C. F. Talman, Librarian, Weather Bureau, Washington, D. C.

**Clinton Iron Ore.** See No. 43.**Coast Ranges.** See No. 77.**Coastal Plains.** See No. 120.**Colloids.** See No. 33.**Concretions**

16. Concretions—Tarr, W. A.

150 entries, 90% complete, mostly abstracted.

For consultation, address W. A. Tarr, 1316 Ross Street, Columbia, Missouri.

**Corals**

17. Madreporarian Corals—Vaughan, T. W.

Some thousands of entries, as complete as practicable up to 1914-15.

For consultation, address T. W. Vaughan, U. S. National Museum, Washington.

**Coral Reefs**

18. Coral Reefs—Davis, William M.

Approximately 600 entries, 90% complete, mostly abstracted.

For consultation, address W. M. Davis, 31 Hawthorne Street, Cambridge, Mass.

**Cretaceous.** See Nos. 49, 62, 89 and 90.

**Crinoidea**

19. Crinoidea; Genera and Species—Wood, E.

About 5000 entries. Incomplete by perhaps 2500 cards.

Includes synonymy.

**Crystallography**

20. Growth of Crystals under Pressure—Taber, S.

About 150 entries. Incomplete.

21. A List of New Crystal Forms of Minerals—Whitlock, H. P.

1890–1920. Number of entries 7000, complete to date. In press as Bulletin of American Museum of Natural History.

See also No. 34.

**Devonian**

- 21a. Bibliographic Index of North American Devonian Invertebrates—Weller, S.

Many thousands of entries, 75% complete. Like Carboniferous list but no similar list has ever been published.

22. Devonian Fossils—Kindle, E. M.

5000 entries, three-fourths complete. Consists of species of genera grouped in biological order under phyla and alphabetically within the groups.

For consultation, address E. M. Kindle, Canadian Geological Survey, Ottawa, Canada.

**Diastrophism**

23. Fault Troughs—Taber, S.

About 100 entries. Incomplete.

24. Local Folds—Power, S.

50 entries. Very complete. Includes anticlines 3 feet to 100 feet long. Monoclines of the same size.

For consultation, address S. Powers, Box 2022, Tulsa, Oklahoma.

25. Shore Line Topography and Changes of Level—Johnson, D. W.

About 1800 entries. Fairly complete as to most important papers. Many abstracted.

For consultation, address D. W. Johnson, Columbia University, New York City.

26. Tectonics—Bucher, W. H.

About 250 entries, mostly European Literature. In process of construction.

For consultation, address Walter H. Bucher, University of Cincinnati, Cincinnati, Ohio.

**Economic Geography**

27. Economic Geography—Bishop, A. L.

700 to 800 entries to about 1916–17.

For consultation, address A. L. Bishop, Yale University, New Haven, Conn.

**Economic Geology**

28. Geology, Mineral Resources, and Mineral Industry of Foreign Countries—Section of Foreign Mineral Reserves, U. S. Geological Survey.

19,000 entries briefly annotated. Additions at the rate of one thousand per month. Duplicate bibliographies maintained, one by commodities, the other areally. Especially complete for copper, coal and petroleum.

For consultation, address B. L. Johnson, Room 4205 Interior Building, Washington, D. C.

See also Nos. 29, 33, 52, and names of specific materials.

**Engineering Geology**

29. Bed Rock Relations to Structural Engineering—Quirke, T. T.

85 entries, nearly complete.

For consultation, address T. T. Quirke, University of Illinois, Urbana, Ill.

**Esthonia**

30. Esthonia and Gotland—Twenhofel, W. H.

About 200 entries on the faunas.

For consultation, address W. H. Twenhofel, University of Wisconsin, Madison, Wisconsin.

**Europe**

31. Europe (Geography and Physiography)—Lobeck, A. K.

559 entries, about 75% complete. A few mimeographed copies are available for distribution.

For consultation, address A. K. Lobeck, University of Wisconsin, Madison, Wisconsin.

**Eurypterida**

- 31a. Eurypterida—Ruedemann, R.

154 entries, 95% complete.

Could send copies. Address Rudolph Ruedemann, Albany, N. Y.

**Feldspar.** See No. 35.

**Florida.** See No. 119.

**Fossils**

32. Preservation of color in fossils—Greger, D. K.

About 100 entries, practically complete to 1920 for British and American Literature.

For consultation, address D. K. Greger, Room 1373 Arcade Building, St. Louis, Missouri.

**Geochemistry.**

33. Bibliography of Colloids in Geology and Mining—Saville, Thordike.

89 entries, very complete to 1919.

For consultation, address R. W. Sayles, Harvard University, Cambridge, Massachusetts. (W. H. Bucher has numerous additional references.)

34. Geologic Thermometry—Winchell, A. N.

Complete so far as known. Arranged by substance and typewritten on 20 large filing cards. Copy may be obtained at cost of reproduction.

For consultation, address A. N. Winchell, University of Wisconsin, Madison, Wisconsin.

35. Physical and Chemical Nature of the Feldspars—Alling, H. L.  
107 entries, 1300 chemical analyses.  
For consultation, address Harold L. Alling, University of Rochester, Rochester,  
N. Y.  
See also No. 111.

### Geography

36. Teaching of Geography—Whitbeck, R. H.  
Fairly complete for articles outside of the *Journal of Geography*, none of which  
are included.  
See also Nos. 1, 1a, 1d, 15a, 48, 56, 61, 74, 79, 88, 108, 109, 110, 124, 130.

### Geology

37. Geology in its Different Branches—Geological Department,  
Johns Hopkins University, Baltimore, Md.  
About 156,000 cards, practically complete since 1900. A complete analytical  
catalogue.  
For consultation, address Edward B. Mathews, Johns Hopkins University,  
Baltimore, Md.

**Geophysics.** See Nos. 20, 34.

### Glass Sand

38. Glass Sand—Richardson, C. H.  
135 entries. A continuation of the bibliography published in connection with  
the Glass Sands of Kentucky.  
For consultation, address Charles H. Richardson, Syracuse University, Syracuse,  
New York.

**Gotland.** See Esthonia.

### Graphite

39. Graphite—Ferguson, H. G.  
Practically complete to 1919. Abstracted in part. Arranged alphabetically.  
For consultation, address H. G. Ferguson, U. S. Geological Survey, Washington,  
D. C.

**Great Basin.** See No. 79.

**Ground Water.** See No. 40.

### Gypsum

- 39a. Gypsum—Wilder, F. A.  
600 entries, four-fifths complete.  
To be published in monograph on Gypsum by Iowa Geological Survey.

**Hispanic America.** See Nos. 6, 55, 56.

### Hydrology

40. Ground Water Hydrology—Dowell, N. E.  
Recently begun.  
For consultation, address O. E. Meinzer, Chief, Ground Water Division, U. S.  
Geological Survey, Washington, D. C.

**Idaho**

41. Geology, Mineralogy, and Related Subjects of Idaho—Shannon, E. V.  
Reasonably complete.  
For consultation, address Earl V. Shannon, U. S. National Museum, Washington, D. C.

**Indiana**

42. Stratigraphy and Paleontology of Indiana—Cumings, E. R.  
1000 entries, some abstracted. Practically complete.  
For consultation, address E. R. Cumings, Indiana University, Bloomington, Indiana.

**Iron Ores**

43. Clinton Iron Ore—Holden, R. J.  
44. History of the Iron Ore Industry—Holden, R. J.  
45. Limestone Limonite Ore—Holden, R. J.  
46. Oriskany Iron Ore—Holden, R. J.  
For consultation, address R. J. Holden, Virginia Polytechnic Institute, Blacksburg, Virginia.  
47. Iron Ores of the United States—Harder, E. C.  
Moderately complete to 1919, inclusive.  
For consultation, address E. C. Harder, 1111 Harrison Bldg., Philadelphia, Pa.

**Irrigation**

48. Irrigation—Whitbeck, R. H.  
"A reasonably valuable bibliography."

**Kansas**

49. Comanchean of Kansas—Twenhofel, W. H.  
Probably complete.  
For consultation, address W. H. Twenhofel, University of Wisconsin, Madison, Wisconsin.  
50. Geology of Kansas—Moore, R. C.  
About 1000 entries, abstracted. Practically complete.  
For consultation, address R. C. Moore, State Geological Survey, Lawrence, Kansas.

**Kentucky**

51. Geology of Kentucky—Miller, A. M.  
614 entries. Very complete. A revision of the bibliography published in the Geology of Kentucky, Kentucky Geological Survey. May be consulted by paying for making a duplicate copy.  
For consultation, address Arthur M. Miller, University of Kentucky, Lexington, Kentucky.  
52. Bibliography of Building Stones—Richardson, C. H.  
77 entries, just begun. To be published in Kentucky Geological Survey Bulletin on Report of Building Stones of Kentucky.

**Loess**

53. Loess of the World—Shaw, E. W.  
About 1000 entries, 90% complete.  
For consultation, address E. W. Shaw, 302 Cosden Building, Tulsa, Oklahoma.

**Maps**

54. Geological Maps on Scales below 1/250,000 Representing Larger Geographical Units—Bucher, W. H.  
250 entries. In process of construction.  
For consultation, address W. H. Bucher, University of Cincinnati, Cincinnati, Ohio.
55. Lists of Geological Maps of South America with Index Map—U. S. Geological Survey, assisted by the American Geographical Society.
56. Maps of Brazil and Hispanic America—American Geographic Society.  
A list of maps published in scientific and other journals.  
About 1200 entries, 90% complete. From ten to twelve copies typed and bound. Will be sold to libraries at cost, \$25.00 to \$50.00. Parts 2 and 4 proposed will comprise maps published by Governments, and maps from other sources.  
Can be consulted at the American Geographical Society, Broadway at 156th Street, New York City.
57. Maps of Siberia—Prindle, L. M.
58. Status of areal geologic mapping in the Pacific region.  
Part of symposium before Pan-Pacific Scientific Conference.  
Contains much bibliographic data.

**Mesozoic.** See Nos. 89, 90 and under subdivisions of era.

**Meteorites**

59. Meteorites—Merrill, G. P.  
Only partially complete.  
For consultation, address G. P. Merrill, U. S. National Museum, Washington, D. C.

**Michigan**

60. Bibliography of Michigan Geology—Ehlers, G. M. and Stevenson, E. B.  
750-800 entries practically complete as to North American references.  
For consultation, address Ehlers, G. M., University of Michigan, Ann Arbor, Michigan.

**Mineralogy.** See Nos. 20, 21, 33, 35 and 96.

**Mining.** See No. 33.

**Minnesota**

61. Geography of Southeastern Minnesota—Colby, C. C.  
150 entries, complete to 1914.

**Miocene.** See No. 65.

**Mississippi**

62. Cretaceous of Mississippi—Stephenson, L. W.  
107 entries, nearly complete.  
For consultation, address L. W. Stephenson, Room 4218 Interior Building, U. S. Geological Survey, Washington, D. C.

**Missouri**

63. Bibliography of Missouri Geology—Keyes, C. R.  
10,000 entries, abstracted and analytical. Approximately complete.  
Not open for consultation.

**Mollusca**

64. Bibliography of the Recent and Fossil Mollusks of the Family Pyramidellidae—Bartsch, Paul.  
6,000 to 8,000 cards.  
For consultation, address Paul Bartsch, U. S. National Museum, Washington, D. C.
65. East Coast Miocene Mollusca—Gardner, J.  
About 1000 entries by species. Complete to 1916.  
For consultation, address Julia Gardner, U. S. National Museum, Room 404, Washington, D. C.
66. Genus *Arca*—Sheldon, P. G.  
Several thousand entries by species. Abstracted—not kept up to date.  
For consultation, address Pearl G. Sheldon, Cayuga Heights, New York.
67. Molluscan Literature—Dall, W. H. and Johnson, F.  
About 11,800 entries, approximately complete 1860–1921.  
For consultation, address W. H. Dall, U. S. National Museum, Room 409, Washington, D. C.
68. Mollusks—Recent and Fossil 1704–1855, Dall, W. H. and Deshayes, G. P.  
200,000 cards by genera and species. Approximately complete to 1850.  
For consultation, address W. H. Dall, U. S. National Museum, Room 409, Washington, D. C.

**Molybdenum**

69. Molybdenum—Hess, F. L.  
About 380 entries, abstracted and analytical. Important articles only for last 15 years.  
For consultation, address F. L. Hess, U. S. Geological Survey, Washington, D. C.

**Montana**

- 69a. Bibliography of Montana Geology—Bevan, A.  
About 500 entries. Incomplete for early years.
70. Bibliography on the Geology of Montana—Montana State Bureau of Mines.

**Natural Bridges**

71. North American Natural Bridges—Cleland, H. F.  
For consultation, address H. F. Cleland, Williamstown, Massachusetts.

**Natural Gas.** See Petroleum.

**Newfoundland.** See No. 10.

**New Mexico**

72. Bibliography of New Mexico Geology and Mining—Keyes, C. R.  
12,000 entries, abstracted and analytical. Approximately complete to date.  
Cannot be consulted at present.
73. Paleocene Vertebrates of San Juan, New Mexico—Matthew, W. D.  
Annotated and chronological. List approximately complete to 1888.  
For consultation, address W. D. Matthew, American Museum of Natural History, New York City.

**New York**

74. Geology (and Natural Geography) of Western New York (Old Fourth District)—Chadwick, George H.  
About 250 entries. In process of construction. Articles will be abstracted.  
All geological localities are being indexed by quadrangles.  
For consultation, address George H. Chadwick, University of Rochester, Rochester, New York.

**North America**

75. Bibliography of Geological Bibliographies in North America, 1892–1918—Wentworth, C. K.  
750 titles based in main on U. S. Geological Survey bibliographies.  
For consultation, address C. K. Wentworth, State University of Iowa, Iowa City, Iowa.
76. Bibliography of North American Geology—Nickles, J. M.  
Kept up to date so far as possible by Mr. Nickles in the library of the U. S. Geological Survey, Washington, D. C. Bibliographies on particular subjects are entered.
77. Geology and Paleontology of the Coast Ranges of Western North America—Clark, B. L.  
In process of construction.
78. Geology and Paleontology of the Great Basin Province of America—Ripley, H. E., under direction of J. C. Merriam.  
817 articles approximately complete.  
For consultation, address J. C. Merriam, Carnegie Institution of Washington, Washington, D. C.  
See also Nos. 87, 89, 92.

**Ohio**

79. Physiography of Ohio—Hubbard, G. D.  
"Fairly complete."

**Oil.** See Petroleum.**Oil Shales**

80. Oil Shales—Blackwelder, E.  
About 125 entries, many abstracted. About 60% complete.  
For consultation, address Eliot Blackwelder, 317 Railway Exchange Building, Denver, Colorado.

**Oregon**

81. Geology and Paleontology of the John Day Region, Oregon—Jillson, W. R.  
About 100 entries complete to 1917.  
For consultation, address R. S. Lull, Peabody Museum, Yale University, New Haven, Connecticut.

**Ostracods**

82. Fossil Ostracoda—Bassler, R. S.  
3000 entries, nearly complete.  
For consultation, address R. S. Bassler, National Museum, Washington, D. C.

**Paleobotany**

83. Compendium of Paleobotany—Schmidt, C. H., *et al.*  
About 100,000 entries of 20,000 titles arranged chronologically under author, with a complete alphabetical species index. Practically complete 1753 to date.  
For consultation, visit Room 330 U. S. National Museum, Washington, D. C.
84. Fossil Plants—Berry, E. W.  
About 20,000 entries by species, arranged under genera, with complete synonymy, geologic and geographic occurrences. Complete for post-Paleozoic.  
For consultation, address E. W. Berry, Johns Hopkins University, Baltimore, Md.
85. Paleobotany—Berry, E. W.  
5000 entries, complete.  
For consultation, address E. W. Berry, Johns Hopkins University, Baltimore, Md.
86. Paleobotanical Literature Available in the Public Libraries of New York City, and especially in the Library of the New York Botanical Garden—Hollick, Arthur.  
About 2,250 entries, 95% complete.  
For consultation, address Arthur Hollick, New York Botanical Gardens, New York City.
87. Paleozoic Plants of North America—Noe, A. C.  
About 1500 entries—perhaps two-thirds complete.

**Paleoecology**

88. Paleoecology: Bad Lands; Flora, Fauna, Climate, Physiography—Clements, F. E.  
Merely under way—abstracted.

**Paleogeography.** See No. 94.**Paleontology (Invertebrate)**

89. Bibliographic Index of North American Mesozoic Invertebrates 1891–1921—Stanton, T. W.  
5000 entries, genera and species arranged alphabetically, 99% complete.  
Supplement to U. S. Geological Survey Bulletin 102.  
For consultation, address T. W. Stanton, U. S. National Museum, Washington, D. C.
90. Bibliographic Index of South American Mesozoic Invertebrates 1891–1921.  
About 2500 entries, genera and species arranged alphabetically, 90% complete.  
For consultation, address T. W. Stanton, U. S. National Museum, Washington, D. C.
91. Paleozoic Invertebrates—Schuchert C., Bassler, R. S., *et al.*  
30,000 entries, approximately complete to 1910.  
For consultation, address R. S. Bassler, U. S. National Museum, Washington, D. C.  
See also Nos. 4, 5, 10, 11, 13, 13a, 17, 19, 21a, 30, 31a, 32, 64–68, 79, 81, 82.

**Paleontology (Vertebrate)**

92. Bibliography and Catalogue of North American Fossil Vertebrates—Hay, O. P.  
Supplement to Bulletin 179, U. S. Geological Survey, 1902, with same title.  
About 7812 entries in bibliography, 45,000 in catalogue; analytical.  
For consultation, address O. P. Hay, Room 15, U. S. National Museum, Washington, D. C.
- 92a. Marine Mammals, especially Pinnipedia and Cetacea, fossil species only—Kellogg, R.  
Over 1000 entries. Pinnipedia in press, Cetacea in preparation.  
For consultation address or visit Remington Kellogg, Bureau of Biological Survey, U. S. Department of Agriculture, Washington, D. C.
93. Paleozoic and Triassic Footprints—Lull, R. S.  
About 400 entries, quite complete.  
For consultation, address R. S. Lull, 121 Osborn Zoölogical Laboratory, Yale University, New Haven, Connecticut.
94. Permian Vertebrates and Late Paleozoic Geological Formations and Paleogeography—E. C. Case.  
For consultation, address E. C. Case, University of Michigan, Ann Arbor, Michigan.  
See also Nos. 73, 79, 81.
- 94a. Vertebrate Paleontology—Sinclair, W. J.  
594 entries complete and kept up to date. A catalogue of types, figured specimens, and every specimen referred to in any publication, with bibliographic reference to first place of publication or illustration. Covers vertebrates in Princeton Museum.  
For consultation visit the Princeton Museum, Princeton, N. J.

**Paleozoic.** See Nos. 87, 91, 93, 94 and under subdivisions of era.

**Pennsylvania**

95. Bibliography of Pennsylvania Geology—Ashley, George H.  
Just started.  
For consultation, address George H. Ashley, State Capitol, Harrisburg, Pa.
96. Bibliography of Pennsylvania Mineralogy—Gordon, S. G.  
About 500 entries, probably complete.

**Permian.** See Nos. 13a, 87, 91, 93, 94.

**Personal Bibliography**

97. Bibliography of the Published Writings of Edward Drinker Cope, Brown, A. M. for H. F. Osborn.  
1365 entries, complete.  
For consultation, address H. F. Osborn, American Museum of Natural History, New York City.

**Petroleum**

98. Geology and Statistics of Petroleum for the United States—Richardson, G. B.  
Several thousand entries, including the most important publications since 1900.  
For consultation, address G. B. Richardson, U. S. Geological Survey, Washington, D. C.

99. Latin American Petroleum—Shaw, E. W.  
About 1000 entries, 90% complete.  
For consultation, address E. W. Shaw, 302 Cosden Building, Tulsa, Oklahoma.
100. Monthly Manuscript Bibliography of Petroleum—Bureau of Mines.  
Issued in mimeographed form.
101. Petroleum and Natural Gas—DeGolyer, E.  
9000 to 10,000 entries. 80% complete.  
For consultation, address E. DeGolyer, 65 Broadway, New York City.
102. Petroleum and Natural Gas: Geologic Occurrence, Statistics and Technology—Johnson, Huntley and Somers.  
7000 entries, fairly complete.  
For consultation, address Johnson, Huntley and Somers, Oil and Gas Building, University of Pittsburgh, Pittsburgh, Pa.  
See also No. 80.

**Petrography.** See Petrology.

### **Petrology**

103. Chemical Analyses of Igneous Rocks—Washington, H. S.  
Supplementary to U. S. Geological Survey Professional Paper 99.  
For consultation, address H. S. Washington, Geophysical Laboratory, Washington, D. C.
104. Igneous Rocks, Chemical Composition—Mathews, E. B.  
About 9,900 entries. Practically complete by rock names and silica content.  
Is kept up to date.  
For consultation, address E. B. Mathews, Johns Hopkins University, Baltimore, Md.
- 104a. Petrographical terms—Johannsen, A.  
10,000–15,000 typed pages, with abstracts in the language of the original.  
Cannot be consulted at present.
105. Stratigraphy and Lithogenesis—Van Ingen, G.  
Several thousand entries, half complete.  
For consultation, address G. Van Ingen, Princeton University, Princeton, N. J.  
See also Geo-chemistry and Sedimentation.

### **Philippines**

- 105a. Geology and Geography of the Philippines—Schenck, H. G.  
657 entries, very complete.  
For consultation address the Librarian, Bureau of Science, Manilla, P. I.

### **Phosphates**

106. Phosphate Deposits—Blackwelder, E.  
About 415 entries, many abstracted. 80% complete.  
For consultation address Eliot Blackwelder, 318 Railway Exchange Building, Denver, Colorado.
107. The Western Phosphate Field—Mansfield, G. R.  
160 entries, many abstracted, 60% complete.  
For consultation, address G. R. Mansfield, U. S. Geological Survey, Washington, D. C.

**Physical Chemistry.** See Geo-Chemistry.

**Physical Geography.** See Physiography.

**Physiography**

108. Dictionary of Physiographic Terms—Campbell, M. R.

About 2600 terms, 8000 definitions.

For consultation, address M. R. Campbell, U. S. Geological Survey, Washington, D. C.

See also Nos. 61, 79, 88, 109, 124.

**Political Geography**

109. Geography, Political and Physical—Libbey, William.

150,000 entries covering completely about 20 principal geographical journals from beginning to date.

For consultation, address William Libbey, Princeton University, Princeton, N. J.

**Regional Geography**

110. Regional Geography—American Geographical Society.

A bibliography on 5 x 8 sheets filling five double filing drawers. Subjects entered by regions and topics. Particularly full for the United States and Latin America.

May be consulted at the building of the Society, Broadway at 156th Street, New York City, daily except Sundays and Holidays.

**Rock Weathering**

111. Rock Weathering—Merrill, G. P.

In form of card index making no pretense of completeness.

For consultation, address G. P. Merrill, U. S. National Museum, Washington, D. C.

**Salines.** See No. 112.

**Salt**

112. Salt and Salines—Phelan, W. C.

Complete to date.

For consultation, address W. C. Phelan—The Solvay Process Co., Syracuse, New York.

113. Salt, Sulphur, and Salt Somes—DeGolyer, E.

400-500 entries. Possibly 80% complete. By author and locality.

For consultation, address E. DeGolyer, 65 Broadway, New York City.

**Salt Domes.** See No. 113.

**Sedimentation**

114. Sedimentation—Trowbridge, A. C., Wentworth, C. K., *et al.*

About 1000 entries, annotated in part. A working bibliography for courses in Sedimentation, especially full in the subjects of conglomerates, gravel, pebbles, etc.

For consultation, address A. C. Trowbridge, State University of Iowa, Iowa City, Iowa.

115. Sedimentation—Twenhofel, W. H. and Thwaites, F. F.

About 1000 entries, partially abstracted.

For consultation, apply to W. H. Twenhofel, University of Wisconsin, Madison, Wisconsin.

116. Sedimentation, Sediments, Sedimentary Processes and Rocks—  
A Manuscript File of Definitions—Wentworth, C. K.

About 700 terms, 1600 definitions, including authority and date and quoted definitions.

For consultation, address C. K. Wentworth, State University of Iowa, Iowa City, Iowa.

See also Nos. 14, 16, 18, 53.

- 116a. Sedimentology—Goldman, M. I.

2500–3000 entries, 5% complete.

For consultation see M. I. Goldman, U. S. Geological Survey, Washington, D. C.

**Shore Lines.** See No. 25.

**Siberia.** See No. 57.

### **Sink Holes**

117. Sink Holes—Cleland, H. F.

For consultation, address H. F. Cleland, Williamstown, Mass.

**South America.** See Nos. 6, 55, 56, 99.

**Stratigraphy.** See Nos. 10, 11, 22, 26, 49, 62, 73, 74, 105.

**Structural and Dynamical Geology.** See Diastrophism.

### **Stylolites**

118. Stylolites—Tarr, W. A.

100 entries, mostly abstracted. About 95% complete.

For consultation, address W. A. Tarr, 1316 Ross Street, Columbia, Mo.

**Sulphur.** See 113.

**Tectonics.** See Diastrophism.

### **Tertiary**

119. American Tertiary Fossils—Marcou, J. B. and Dall, W. H.

About 19,500 entries, 1758 to date. Approximately complete, arranged by generic and specific names.

For consultation, address W. H. Dall, U. S. National Museum, Room 409, Washington, D. C.

120. Tertiaries of Florida, West Indies, and Brazil—Maury, Carlotta.

Incomplete.

For consultation, address Carlotta Maury, Cornell University, Ithaca, New York.

### **Texas**

121. Gulf Coastal Plain of Southern Texas—Trowbridge, A. C. and Glock, W. S.

116 entries abstracted. Practically complete.

For consultation, address A. C. Trowbridge, State University of Iowa, Iowa City, Iowa.

### **Titanium**

122. Titanium—Hess, F. L.

About 230 entries, abstracted and analytical. Important articles only for the last 15 years.

For consultation, address F. L. Hess, U. S. Geological Survey, Wash., D. C.

**Triassic.** See No. 93 and Mesozoic.

### **Tungsten**

123. Tungsten—Hess, F. L.

About 1000 entries, abstracted and analytical. Important articles only for the last 15 years.

For consultation address F. L. Hess, U. S. Geological Survey, Washington, D. C.

### **United States**

124. Physiography of the United States—Lobeck, A. K.

About 1600 entries arranged by physiographic provinces, sub-provinces, and alphabetically by author under each. In mimeographed form, about 70 type-written pages. A very limited number are available for distribution.

For consultation, address A. K. Lobeck, University of Wisconsin, Madison, Wisconsin.

See also No. 98.

### **Uranium**

125. Uranium—Hess, F. L.

About 300 entries, abstracted and analytical. Important articles only for the last 15 years.

For consultation, address F. L. Hess, U. S. Geological Survey, Washington, D. C.

### **Vanadium**

126. Vanadium—Hess, F. L.

About 260 entries. Important articles only for the last 15 years.

For consultation, address F. L. Hess, U. S. Geological Survey, Washington, D. C.

### **Vermont**

127. The Petrography of Braintree and of Randolph, Vermont—Cabeen, C. K.

15 entries.

**Weathering.** See No. 111.

**West Indies.** See No. 120.

### **World Geology**

128. A Bibliography of Geological Bibliographies—Mathews, E. B. and Reed, Grace E.

About 4000 entries, quite complete. Continues de Margerie's bibliography to date.

For consultation address Division of Geology and Geography, National Research Council, 1701 Massachusetts Ave., Washington, D. C.

129. A List and Relations of World Strata—Foyles, E. J.

About 2000, just a beginning.

For consultation visit the Department of Geology, American Museum of Natural History, New York City.

### **Zoo-geography**

130. Life Zones—Bureau of Biological Survey, U. S. Department of Agriculture.

Over 1,500,000 cards, dealing to a considerable extent with relation between life distribution and geography.





University of California  
SOUTHERN REGIONAL LIBRARY FACILITY  
405 Hilgard Avenue, Los Angeles, CA 90024-1388  
Return this material to the library  
from which it was borrowed.

---

# Bulletin of the National Research Council

## Volume 1

- Number 1.** The national importance of scientific and industrial research. By George Ellery Hale and others. October, 1919. Pages 43. Price 50 cents.
- Number 2.** Research laboratories in industrial establishments of the United States of America. Completed by Alfred D. Flinn. March, 1920. Pages 85. Price \$1.00.
- Number 3.** Periodical bibliographies and abstracts for the scientific and technological journals of the world. Compiled by R. Cobb. June, 1920. Pages 24. Price 40 cents.
- Number 4.** North American forest research. Compiled by the Committee on American Forest Research, Society of American Foresters. August, 1920. Pages 146. Price \$2.00.
- Number 5.** The quantum theory. By Edwin P. Adams. October, 1920. Pages 81. Price \$1.00.
- Number 6.** Data relating to X-ray spectra. By William Duane. November, 1920. Pages 26. Price 50 cents.
- Number 7.** Intensity of emission of X-rays and their reflection from crystals. By Bergen Davis. Problems of X-ray emission. By David L. Webster. December, 1920. Pages 47. Price 60 cents.
- Number 8.** Intellectual and educational status of the medical profession as represented in the United States Army. By Margaret V. Cobb and Robert M. Yerkes. February, 1921. Pages 76. Price \$1.00.

## Volume 2

- Number 9.** Funds available in 1920 in the United States of America for the encouragement of scientific research. Compiled by Callie Hull. March, 1921. Pages 81. Price \$1.00.
- Number 10.** Report on photo-electricity including ionizing and radiating potentials and related effects. By Arthur Llewelyn Hughes. April, 1921. Pages 87. Price \$1.00.
- Number 11.** The scale of the universe. Part I by Harlow Shapley. Part II by Heber D. Curtis. May, 1921. Pages 47. Price 60 cents.
- Number 12.** Cooperative experiments upon the protein requirements for the growth of cattle. First report of the Subcommittee on Protein Metabolism in Animal Feeding. By Henry Prentiss Armsby, Chairman. June, 1921. Pages 70. Price \$1.00.
- Number 13.** The research activities of departments of the state government of California in relation to the movement for reorganization. By James R. Douglas. June, 1921. Pages 46. Price 60 cents.
- Number 14.** A general survey of the present status of the atomic structure problem. Report of the Committee on Atomic Structure of the National Research Council. By David L. Webster and Leigh Page. July, 1921. Pages 61. Price 75 cents.
- Number 15.** A list of seismological stations of the world. Compiled by Harry O. Wood. July, 1921. Pages 142. Price \$2.00.

## Volume 3

- Number 1.** Research laboratories in industrial establishments of the United States including consulting research laboratories. Originally compiled by Alfred D. Flinn; revised and enlarged by Ruth Cobb. December, 1921. Pages 135. Price \$2.00.

# Reprint and Circular Series of the National Research Council

- Number 1. Report of the Patent Committee of the National Research Council. Presented for the Committee by L. H. Baekeland, Acting Chairman. February, 1919. Pages 24. Price 30 cents.
- Number 2. Report of the Psychology Committee of the National Research Council. Presented for the Committee by Robert M. Yerkes, Chairman. March, 1919. Pages 51. Price 60 cents.
- Number 3. Refractory materials as a field for research. By Edward W. Washburn. January, 1919. Pages 24. Price 30 cents.
- Number 4. Industrial research. By F. B. Jewett. 1918. Pages 16. Price 25 cents.
- Number 5. Some problems of sidereal astronomy. By Henry N. Russell. October, 1919. Pages 26. Price 30 cents.
- Number 6. The development of research in the United States. By James Rowland Angell. November, 1919. Pages 13. Price 25 cents.
- Number 7. The larger opportunities for research on the relations of solar and terrestrial radiation. By C. G. Abbot. February, 1920. Pages 14. Price 20 cents.
- Number 8. Science and the industries. By John J. Carty. February, 1920. Pages 16. Price 25 cents.
- Number 9. A reading list on scientific and industrial research and the service of the chemist to industry. By Clarence Jay West. April, 1920. Pages 45. Price 50 cents.
- Number 10. Report on organization of the International Astronomical Union. Presented for the American Section, International Astronomical Union, by W. W. Campbell, Chairman, and Joel Stebbins, Secretary. June, 1920. Pages 48. Price 50 cents.
- Number 11. A survey of research problems in geophysics. Prepared by Chairmen of Sections of the American Geophysical Union. October, 1920. Pages 57. Price 60 cents.
- Number 12. Doctorates conferred in the sciences by American universities in 1920. Compiled by Callie Hull. November, 1920. Pages 9. Price 20 cents.
- Number 13. Research problems in colloid chemistry. By Wilder D. Bancroft. January-April, 1921. Pages 54. Price 50 cents.
- Number 14. The relation of pure science to industrial research. By John J. Carty. October, 1916. Pages 16. Price 20 cents.
- Number 15. Researches on modern brisant nitro explosives. By C. F. van Duin and B. C. Roeters van Lennep. Translated by Charles E. Munroe. February, 1920. Pages 35. Price 50 cents.
- Number 16. The reserves of the Chemical Warfare Service. By Charles H. Herty. February, 1921. Pages 17. Price 25 cents.
- Number 17. Geology and geography in the United States. By Edward B. Mathews and Homer P. Little. April, 1921. Pages 22. Price 20 cents.
- Number 18. Industrial benefits of research. By Charles L. Reese and A. J. Wadhams. February, 1921. Pages 14. Price 25 cents.
- Number 19. The university and research. By Vernon Kellogg. June, 1921. Pages 10. Price 15 cents.
- Number 20. Libraries in the District of Columbia. Compiled by W. I. Swanton. June, 1921. Pages 19. Price 25 cents.
- Number 21. Scientific abstracting. By Gordon S. Fulcher. September, 1921. Pages 15. Price 20 cents.
- Number 22. The National Research Council. Its services for mining and metallurgy. By Alfred D. Flinn. October, 1921. Pages 7. Price 20 cents.
- Number 23. American research chemicals. By Clarence J. West. September, 1921. Pages 28. Price 50 cents.
- Number 24. Organo-magnesium compounds in synthetic chemistry: a bibliography of the Grignard reaction 1920-1921. By Clarence J. West. (In press.)
- Number 25. A partial list of the publications of the National Research Council to January 1, 1922. February, 1922. Pages 28. Price 25 cents.
- Number 26. Doctorates conferred in the sciences by American universities in 1921. Compiled by Callie Hull and Clarence J. West. (In press.)
- Number 27. List of manuscript bibliographies in geology and geography. Compiled by Homer P. Little. February, 1922. Pages 17. Price 25 cents.

Universit  
Southe  
Libra